

## Q U O T A T I O N

No: PEC ST-384226

## Quoted By:

THYSSENKRUPP MATERIALS NA  
2821 LANGSTAFF ROAD  
CONCORD, ONTARIO L4K 5C6  
Tel: 905 669 9444 Fax: 9057389033

## Quoted To: ( 20115)

DART AEROSPACE  
1270 ABERDEEN ST  
HAWKESBURY, ON K6A 1K7

## Quoted Ship To: ( 1)

DART AEROSPACE  
1270 ABERDEEN ST  
HAWKESBURY, ON K6A 1K7

Trm NET 30 DAYS/NET 30 JOURS Qtd 31Oct11 Qte Ref  
Frt PREPAID Via FOB  
Tel 613-632-9577 Fax 613-632-1053 Ctc CHANTAL  
Slp STAN IVERS (905-532-1350)

## Q U O T A T I O N

QT No: PEC ST-384226

Test Certs: Chem-Y Phys-Y 1 Original copies with Shipment, 1 with Invoice

1 ALUMINUM FLT BAR ECONOPLT 6061-T6511	2 PCS	142 LBS
.500" X 10.00" X 144.5000"		24 ' 1.0000 "
MATERIAL	24 ' 1.0000 " @	13.9171 FT
ENERGY & CAP SURCHG	25.0000 LOT	335.17
		25.00
2 ALUMINUM FLAT BAR 6061-T6511	2 PCS	32 LBS
.750" X 1.50" X 144.0000"		24 FT
MATERIAL	24 FT @	2.9200 FT
		70.08
3 ALUMINUM FLAT BAR 6061-T6511	1 PCS	56 LBS
1.00" x 4.00" X 144.0000"		12 FT
MATERIAL	12 FT @	11.0800 FT
		132.96
4 ALUMINUM FLAT BAR 6061-T6511	1 PCS	26 LBS
1.250" x 1.50" X 144.0000"		12 FT
MATERIAL	<del>12 FT</del> @	4.5500 FT
		54.60
5 ALUMINUM FLAT BAR 6061-T6511	2 PCS	141 LBS
2.00" x 2.50" X 144.0000"		24 FT
MATERIAL	24 FT @	13.0921 FT
		314.21
6 ALUMINUM SHEET 6061 T6	2 PCS	112 LBS
.1250 Nom X 48.0000" X 96.0000"		
MATERIAL	2 PCS @	175.0000 EA
		350.00

MILL TEST REPORTS, PACKING SLIPS ARE TO SENT  
WITH MATERIAL AND FAXED TO THE CUSTOMER PRIOR  
TO SHIPPING.

ATTN: CHANTAL/LINDA

\*\* ALL PACKING SLIPS MUST HAVE THE HEAT NUMBER \*\*

\*\* REFERENCED ON IT \*\*

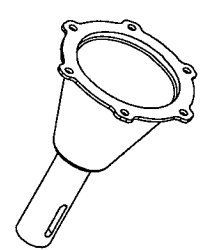
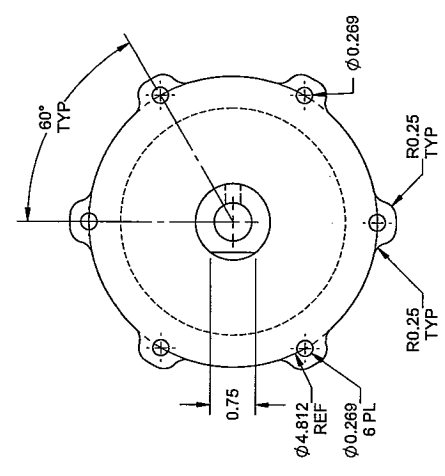
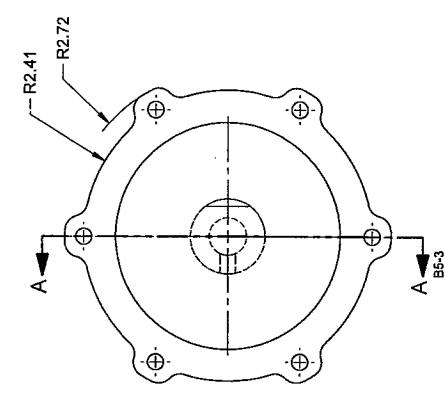
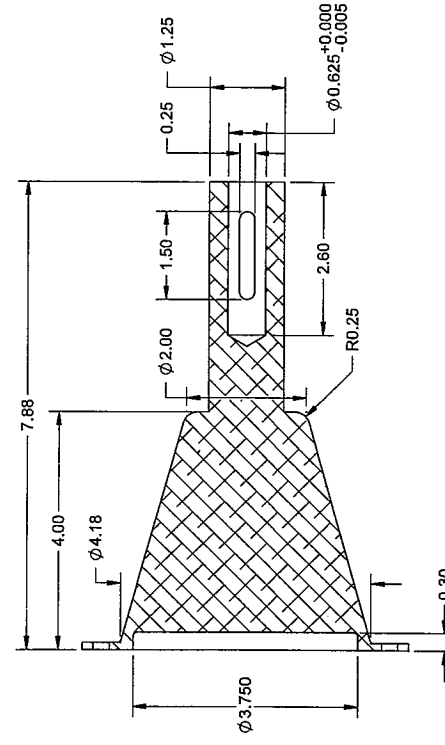
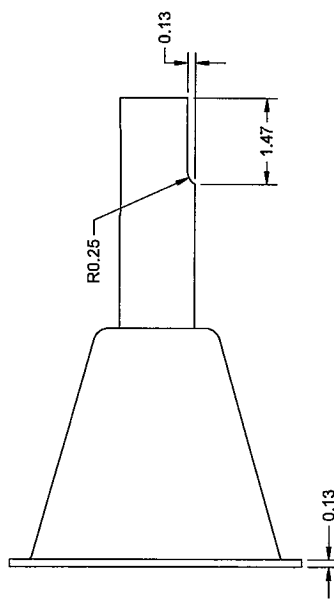
Price in effect at time of shipment.

Price based on receipt of total order.

M4130NT0.500W.049	4.522631579	0	40.91	10
M4130NT0.750W.049	18.40957895	0	105.55	30
M4130NT0.750W.083	2.594736842	0	53.437	20
M4130NT1.000W.120	1.577894737	0	72.42	12
M4130NTS0.500W.035	280.7068421	0	270.9988	120
M4140N-B1.500X1.5000	3.465	0	-1.78E-15	6
M5052H32S.040	7.009052632	0	96	64
M569EX0.50-18F	108	0	206	64
M6061T6B0.250X06.000	7.72	0	20	12
M6061T6B0.375X01.250	5.26E-05	0	11.4072	12
M6061T6B0.375X03.000	0.150526316	0	14.18	6
M6061T6B0.500X02.000	8.95E-05	0	16.1683	10
M6061T6B0.500X02.500	1.844210526	0	12.321	10
M6061T6B0.500X05.000	12.89789474	0	38.475	12
M6061T6B0.500X06.000 ✓	3.906842105	0	25.15	24
M6061T6B0.500X10.000 ✓	22.33215263	0	25	24 24bt
M6061T6B0.500X24.000	0.131578947	0	2.5	0
M6061T6B0.750X00.750	8.097842105	0	25.42	24
M6061T6B0.750X01.500 ✓	0.297063358	0	4.286	24 24bt
M6061T6B0.750X06.000	4.5	0	42.66	6
M6061T6B00750X00.125 ✓	2.462842105	0	43.75	80
M6061T6B1.000X04.000 ✓	40.80531579	0	42.813	12 12bt
M6061T6B1.250X01.250	5.524842105	0	36	12
M6061T6B1.250X04.500 ✓	0.114473684	0	12.7417	12
M6061T6B1.500X01.250 ✓	0.679884211	0	0.112	12 12bt
M6061T6B1.500X01.500	4.136263158	0	23.119	12
M6061T6B1.500X02.000	5.26E-02	0	19.65768	12
M6061T6B1.500X04.000	0.324210526	0	18	10
M6061T6B2.000X01.250	19.32710526	0	66.30263158	20
M6061T6B2.000X02.250.500	10.52547368	0	1.456	12 124bt
M6061T6B2.000X03.500	1.065857895	0	18.1311	12
M6061T6B30000X01.500	0.376684211	0	16.271	20
M6061T6H1.000	3.542315789	0	19.988	12
M6061T6R0.750	1.959263158	0	39.903	40
M6061T6R1.000	10.60673684	0	45.783	12
M6061T6R1.625	0.322105263	0	17.016	6
M6061T6R2.000	0.394736842	0	48.107	6
M6061T6R3.500	3.684210526	0	20.697	8
M6061T6S.080	48.42294737	0	258.3	128
M6061T6T0.250W.035	0.171052632	0	52.5	10
M6061T6T0.375W.035	5.847884211	0	216.3642	100
M6061T6T0.375W.049	25.26315789	0	88	20
M6061T6T0.375W.058	356.4095789	0	598.246	100
M6061T6T0.500W.058	100.9436842	0	181.9	80
M6061T6T0.625W.065	27.91789474	0	57	30
M6061T6T0.875W.058	0.262421053	0	25.334	12
M6061T6T1.000W.188	41.31663158	0	86.522368	40

6061T6S.125X645F ✓

M6061T6T1.000W065	22.70126316	0	101.25	40
M6061T6T3.500W.375	5.686315789	0	22.4231	12
M6061T6T5.000W.125	5.394736842	0	15.5	6
M6061T6TS0.750W.062	18.94736916	0	172.453296	100
M7075T73B2.500X03.25	2.480473684	0	6.065	6 <i>88+</i>
M7075T73B4.000x4.000	0.901052632	0	20.1465	6
MACRLICS.236	29.00650992	0	378.66667	96
MACRYLICS.177	24.12210079	0	20.501785	64
MDELRINB0.250X01.500	54	0	54	0
MDELRINB0.75X1.250	0.647684211	0	31.9328	12
MDELRINR0.750	29.76152632	0	52.949	24
MDELRINR1.000	0.388894737	0	69.727	12
MDELRINR1.2500	0.969263158	0	30.639	24
MDELRINR2.000	0.070842105	0	17.934	10
MDURAS0.035	1.065263158	0	0	0
MKYD6185S.080-P3-52068	73.05653639	0	324.3796282	300
MKYD6185S.080-P3-62015	1.86E-06	0	483.444377	300
MLEXS.060-9034-08	0.666	0	34.54	0
MLEXS.093-F6006-02	52.64632316	0	581.29958	200
MLEXS.118-90318-08	59.25884211	0	1848.384621	108
<del>MNE0605.063</del>	296.7267368	0	417.85	100 <i>400SF</i>



REFERENCE ONLY

SECTION A-A  
B8-3

D4446-1 ENGINE ADAPTER

- NOTES:
- 1) MATERIAL: AISI 303 STAINLESS STEEL BAR  
PER ASTM A582  
REF DART SPEC M303B  
OR  
AISII 304/316 STAINLESS STEEL BAR  
PER ASTM A276 OR ASTM A240  
REF DART SPEC M304B
  - 2) FINISH: N/A
  - 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
  - 4) UNITS: INCHES UNLESS OTHERWISE NOTED
  - 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
  - 6) IDENTIFICATION: IDENTIFY PER QSI 044 6.1
  - 7) WEIGHT: 9.45 lbs

REFERENCE ONLY

PRELIMINARY ISSUE  
11.09.07

DESIGN		DART AEROSPACE LTD
DRAWN		HAWKESBURY, ONTARIO, CANADA
CHECKED		DRAWING NO.
MFG. APPR.		D4446
APPROVED		TITLE
DE APPR.		ENGINE ALIGNMENT TOOL
DATE	11.09.07	NTS

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THIS DOCUMENT IS UNCLASSIFIED AND IS NOT TO BE RELEASED FROM DART AEROSPACE LTD.  
UNLESS PERMITTED BY DART AEROSPACE LTD.

11/02/11  
10:34 AM EDT

**STELfax**

**From:** THYSSENKRUPP MATERIALS NA  
STAN IVERS  
Tel: 905 669 9444  
Fax: 905 738 9033

**To:** DART AEROSPACE  
Attn: 96294  
Tel: 613-632-9577  
Fax: 613-632-1053  
Number of Pages: 3

**Subject:** Sales Acknowledgement

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02Nov11 10:33 S A L E S A C K N O W L E D G M E N T No: PEC ST-385227

Sold By:  
 THYSSENKRUPP MATERIALS NA  
 2821 LANGSTAFF ROAD  
 CONCORD, ONTARIO L4K 5C6  
 Tel: 905 669 9444 Fax: 9057389033

Sold To: ( 20115)  
 DART AEROSPACE  
 1270 ABERDEEN ST  
 HAWKESBURY, ON K6A 1K7

Ship To: ( 1)  
 DART AEROSPACE  
 1270 ABERDEEN ST  
 HAWKESBURY, ON K6A 1K7

Trm NET 30 DAYS/NET 30 JOURS Ord 02Nov11 Due03Nov11  
 Frt PREPAID Via VIM TRANSFER TRUCK FOB CONCORD  
 Con 96294 PO/Rel 153328  
 Slp STAN IVERS (905-532-1350) Tel 613-632-9577 Fax 613-632-1053

S A L E S A C K N O W L E D G M E N T SO No PEC ST-385227  
 Test Certs: Chem Y Phys Y 1 Original copies with Shipment, 1 with Invoice

1 ALUMINUM FLT BAR ECONOPLT 6061-T6511	2 PCS	142 LBS
.500" X 10.00" X 144.5000"		24 ' 1.0000 "
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MATERIAL	24 FT @ 4.5500 FT	109.20
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2.00" x 2.50" X 144.0000"		24 FT
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.1250 Nom X 48.0000" X 96.0000"		
MATERIAL	2 PCS @ 175.0000 EA	350.00

MILL TEST REPORTS, PACKING SLIPS ARE TO SENT  
 WITH MATERIAL AND FAXED TO THE CUSTOMER PRIOR  
 TO SHIPPING.

ATTN: CHANTAL/LINDA

\*\* ALL PACKING SLIPS MUST HAVE THE HEAT NUMBER \*\*

\*\* REFERENCED ON IT \*\*

\*\* CUSTOMER PICK-UP HRS / 9:00 AM TO 4:00 PM \*\*

\*\*\* TEL. 800-926-2600 \*\*\*

\*\*\*\*\*

\* WE STOCK STAINLESS STEEL!!!! \*

\* PLEASE LET US QUOTE YOUR NEXT REQUIREMENT \*

\*\*\*\*\*

02Nov11 10:33      S A L E S      A C K N O W L E D G M E N T      No: PEC ST-385227

**Sold By:**

THYSSENKRUPP MATERIALS NA

2821 LANGSTAFF ROAD

CONCORD, ONTARIO L4K 5C6

**Te1: 905 669 9444 Fax: 9057389033**

Sold To: ( 20115)

**DART AEROSPACE**

Ship To: ( 1)

DART AEROSPACE

S A L E S      A C K N O W L E D G M E N T      SO No PEC ST-385227

Test Certs: Chem Y Phys Y 1 Original copies with Shipment, 1 with Invoice

\*\*\*PLEASE NOTE A \$25.00 ENERGY SURCHARGE WILL BE  
ADDED TO EVERY ORDER.\*\*\*

Order Totals:        6 Items        536 LBS

\*\*\*\*\*

Material	Processing	Freight	Other	Taxes	ORDER AMT
----------	------------	---------	-------	-------	-----------

1,311.62	Processing	Foreign	Other	Taxes	ORDER AMT
1,311.62			25.00	173.76	1,510.38

\*\*\*\*\*

Taxes: ONHSTS 173.76

# THYSSENKRUPP MATERIALS NA

PO Ref 155326

Certificate of Mill Test Results

DART AEROSPACE

BL PBC 787243-001

ALUMINUM EXTRUSION 6061-T6511

3N of 11

500" X 10.00" X 144.5000"

We certify that this is a true copy of the report furnished by the producer of the metal, or data resulting from tests made in approved labs.

Signed by:

*[Signature]*

Pg 1/1



**SERVICE CENTER METALS**  
5850 Quality Way  
Prince George, VA 23875

## CERTIFIED INSPECTION REPORT AND TEST RESULTS FOR EXTRUDED PRODUCTS

OUR ORDER NUMBER	ITEM
135938	5

BL TO	MANIFEST NUMBER	ONE NUMBER	DATE OF SHIPMENT	CERTIFICATION
ThyssenKrupp Materials NA	141340	PL0734	9/30/2011	ASTM-B221-08 StencilContinuous
SHIP TO	CUSTOMER PO	ALLOY/TEMPER	SALES/PERSON	SPECIFICATION
ThyssenKrupp Materials NA PEC	PEC-233244	6061-T6511	David Schroeder	AMS-QQA-200/8
Quantity Certified	1,912 lbs	27 pcs	CUSTOMER PART NUMBER	DESCRIPTION
			PL0734 X 144.5	PL 500 X 10.00

We hereby certify that the material covered by this report has been inspected in accordance with the most recent certification revision, and has been found to meet the applicable requirements described herein, including any specifications forming a part of the description, and that samples representative of the material met the composition limits and had the mechanical properties shown. Items produced and certified as 6061-T6511 also meet the requirements of 6061-T6

### Mechanical Properties

Test No.	Lot No.	Test Date	Ultimate Tensile Strength (KSI)	Yield Strength (KSI)	Percent Elongation
1	201114797	09/27/11	46.2	42.9	14.0

### Chemical Composition for Aluminum Alloy 6061

Cast Number	Alloy	Si	Fe	Cu	Mn	Mg	Cr	Zn	Ti	Others Each Total	Melted In
C07H0639	6061	0.72	0.29	0.35	0.09	0.89	0.09	0.01	0.01	0.05 max 0.15 max	United States of America

Print Date: 9/30/2011

*[Signature]*

Calvin J. Winnans, Director of Quality & Technical Services



# THYSSENKRUPP MATERIALS NA

DART AEROSPACE

ALUMINUM FLAT BAR 6061-T6511

.750" X 1.50" X 14'-0000"

PART NO.

PO/Ref 153328

We certify that this is a true copy of the report furnished by the producer of the metal, or data resulting from tests made in approved labs.

## Certificate of Mill Test Results

BL PEC 737243-002

3Nov11

Signed by:

Pg 1/2

**KAISER**  
**ALUMINUM**  
**FABRICATED PRODUCTS**

*Best in Class*

### CERTIFIED TEST REPORT

<http://Certs.KaiserAluminum.com>

KAISER ALUMINUM  
FABRICATED PRODUCTS, LLC  
5205 KAISER DRIVE  
KALAMAZOO, MI 49048

CUSTOMER PO NUMBER: PEC-232871-1		CUSTOMER PART NUMBER: ALREC00806		PRODUCT DESCRIPTION: .750 X 1.500 SC RECT BAR	
KAISER ORDER NUMBER: 603193	LINE ITEM: 001	SHIP DATE: 09/13/2011	KAISER LOT NUMBER: HK079 687	ALLOY: 6061	TEMPER: T6511
WEIGHT SHIPPED: 1016.000 LB	QUANTITY: 64.000 PCS	B/L NUMBER: 601406	DIAM/DAFT/HKNS: 	WIDTH: 	LENGTH: 12.000 FT
SHIP TO:  THYSSENKRUPP MATERIALS NA 2821 LANGSTAFF ROAD CONCORD, ON L4K 5C6 CANADA			SOLD TO:  THYSSENKRUPP MATERIALS NA 2821 LANGSTAFF ROAD CONCORD, ON L4K 5C6 CANADA		

### Actual Physical Properties

REFERENCE	DASH#	SAMPLE#	UTS (KSI)	YTS (KSI)	ELONG%	HARDNESS	CONDUCT.	BEND
XTR000210	0001	C001	46.8	40.1	20.8	RE 95	N/A	N/A
XTR000210	0001	C002	48.9	44.4	20.3	RE 96	N/A	N/A
XTR000210	0001	C003	47.4	42.3	20.1	RE 96	N/A	N/A
XTR000210	0001	C004	49.9	45.2	18.6	RE 96	N/A	N/A
XTR000210	0001	C005	46.9	40.9	21.5	RE 96	N/A	N/A
XTR000210	0001	C006	51.6	46.9	16.7	RE 97	N/A	N/A
XTR000210	0001	C007	48.1	41.0	19.2	RE 98	N/A	N/A

### Chemical Composition (wt%), Aluminum Remainder

LIMITS	Si	Fe	Cu	Mn	Mg	Cr	Zn	Ti	Pb	Bi	Zr	Ea	Tot
Maximum	0.80	0.70	0.40	0.15	1.20	0.35	0.25	0.15	NA	NA	NA	0.05	0.15
Minimum	0.40	0.00	0.15	0.00	0.80	0.04	0.00	0.30	NA	NA	NA	0.00	0.00
A31560	.72	.32	.24	.06	.94	.10	.03	.31	.03	.03	.00	.01	.02

### Applicable Requirements:

ASTM-B221-08-STENCILED ASME-SB221 1998 SECT II AMS-QQ-A-200/8 UNS#96061 (T6511 also conforms to T6-not applicable to other tempers)

### CERTIFICATION

Kaiser Aluminum Fabricated Products, LLC hereby certifies that metal shipped under this order has been inspected and tested and found in conformance with applicable specifications forming a part of the description set forth in Kaiser's sales acknowledgement form. Any warranty is limited to that shown on Kaiser's general terms and conditions of sale. Test reports are on file, subject to examination.

Alex Yeh, Quality & Technology Manager

*Alex Yeh*

Plant Serial: 3C007181

Kaiser Order Number: 603193

Page 1 of 2

Line Item: 001

DART AEROSPACE

PO/Ref 153328

BL PEC-737243-002

3Nov11

ALUMINUM FLAT BAR 6061-T6511

We certify that this is a true copy of the report  
furnished by the producer of the metal, or data  
resulting from tests made in approved labs.

Signed by:

Pg 2/2

750" X 1.50" X 144.0000"

PART NO.

**KAISER**  
**ALUMINUM**  
**FABRICATED PRODUCTS**

*Best in Class*

**CERTIFIED TEST REPORT**

<http://Certs.KaiserAluminum.com>

KAISER ALUMINUM  
FABRICATED PRODUCTS, LLC  
5205 KAISER DRIVE  
KALAMAZOO, MI 49048

### Miscellaneous Notes

MANUFACTURED IN USA (COMMERCE, CA) MELTED IN USA

### CERTIFICATION

Kaiser Aluminum Fabricated Products, LLC hereby certifies that metal shipped under this order has been inspected and tested and found in conformance with applicable specifications forming a part of the description set forth in Kaiser's sales acknowledgement form. Any warranty is limited to that shown on Kaiser's general terms and conditions of sale. Test reports are on file, subject to examination.

Alex Yeh, Quality & Technology Manager

*Alex Yeh*

Plant Serial: 00007181

Kaiser Order Number: 603193

Page 2 of 2

Line Item: 001

POIRel 133328  
 We certify that this is a true copy of the report  
 furnished by the producer of the metal, or data  
 resulting from tests made in approved labs.

Signed by \_\_\_\_\_  
 Attn: \_\_\_\_\_



**SERVICE CENTER METALS**  
 5850 Quality Way  
 Prince George, VA 23875

**CERTIFIED INSPECTION REPORT AND TEST RESULTS  
 FOR EXTRUDED PRODUCTS**

<b>BILL TO</b> ThyssenKrupp Materials NA	<b>MANIFEST NUMBER</b> 141232	<b>DIE NUMBER</b> RB0128	<b>DATE OF SHIPMENT</b> 9/29/2011	<b>CERTIFICATION</b> ASTM-B221-08 StencilContinuous	<b>OUR ORDER NUMBER</b> 135334	<b>ITEM</b> 1
<b>SHIP TO</b> ThyssenKrupp Materials NA PEC	<b>CUSTOMER PO</b> PEC-232958	<b>ALLOY/TEMPER</b> 6061-T6511	<b>SALESPERSON</b> David Schroeder	<b>SPECIFICATION</b> AMS-QQA-200/8		
<b>Quantity Certified</b> 2,202 lbs	<b>CUSTOMER PART NUMBER</b> RB0128	<b>DESCRIPTION</b> SCRB 1.000x4.000				

We hereby certify that the material covered by this report has been inspected in accordance with the most recent certification revision, and has been found to meet the applicable requirements described herein, including any specifications forming a part of the description, and that samples representative of the material met the composition limits and had the mechanical properties shown. SCM extrusions are manufactured in the USA from ingot melted and cast in the United States or Canada.

**Mechanical Properties**

Test No.	Lot No.	Test Date	Ultimate Tensile Strength (KSI)	Yield Strength (KSI)	Percent Elongation
1	201114341	09/20/11	47.7	44.3	16.1
2	201114341	09/20/11	49.0	45.9	15.0
1	201114690	09/23/11	51.3	47.9	14.3

**Chemical Composition for Aluminum Alloy 6061**

Cast Number	Alloy	Si	Fe	Cu	Mn	Mg	Cr	Zn	Ti	Others	Total
0911086	6061	0.76	0.36	0.30	0.10	0.86	0.10	0.08	0.02	0.05 max	0.15 max
0911087	6061	0.74	0.35	0.31	0.12	0.86	0.10	0.07	0.02	0.05 max	0.15 max
C07H0652	6061	0.72	0.26	0.33	0.09	0.90	0.09	0.01	0.01	0.05 max	0.15 max
C29J1007	6061	0.75	0.37	0.32	0.11	0.89	0.10	0.01	0.01	0.05 max	0.15 max

Melted In  
 United States of America

Print Date: 9/29/2011

*Calvin J. Williams*

Calvin J. Williams, Director of Quality & Technical Services

# THYSSENKRUPP MATERIALS NA

DART AEROSPACE

ALUMINUM FLAT BAR 6061-T6511

1.250" X 1.500" X 12.000"

PART NO:

PO/Ref 153328

We certify that this is a true copy of the report furnished by the producer of the metal, or data resulting from tests made in approved labs.

## Certificate of Mill Test Results

BL PEC 737243-004

3 Nov 11

Signed by:

Pg 1/1

**KAISER**  
**ALUMINUM**  
**FABRICATED PRODUCTS**

*Best in Class*

## CERTIFIED TEST REPORT

<http://Online.KaiserAluminum.com>

KAISER ALUMINUM  
FABRICATED PRODUCTS, LLC  
5205 KAISER DRIVE  
KALAMAZOO, MI 49048

CUSTOMER PO NUMBER: PEC-233415-1		CUSTOMER PART NUMBER: ALREC00007		PRODUCT DESCRIPTION: 1.250 X 1.500 SC RECT BAR	
KAISER ORDER NUMBER: 604562	LINE ITEM: 001	SHIP DATE: 09/30/2011	KAISER LOT NUMBER: Z00261005	ALLOY: 6061	TEMPER: T6511
WEIGHT SHIPPED: 847.000 LB	QUANTITY: 32.000 PCS	B/L NUMBER: 601535	DIAM/DAF/THKNS: 	WIDTH: 	LENGTH: 12.000 FT
SHIP TO:  THYSSENKRUPP MATERIALS NA 2821 LANGSTAFF ROAD CONCORD, ON L4K 5C6 CANADA			SOLD TO:  THYSSENKRUPP MATERIALS NA 2821 LANGSTAFF ROAD CONCORD, ON L4K 5C6 CANADA		

## Actual Physical Properties

REFERENCE	DASH#	SAMPLE#	UTS (KSI)	YTS (KSI)	ELONG%	HARDNESS	CONDUCT.	BEND
Z0026LC05	0001	1	51.7	48.2	19.7	N/A	N/A	N/A
Z0026LC05	0001	2	49.4	45.6	17.5	N/A	N/A	N/A
Z0026LC05	0001	3	55.8	52.6	16.8	N/A	N/A	N/A
Z0026LC05	0001	4	51.8	43.4	16.6	N/A	N/A	N/A

## Chemical Composition (wt%), Aluminum Remainder

LIMITS	Si	Fe	Cu	Mn	Mg	Cr	Zn	Ti	Pb	Bi	Zr	Ea	Tot
Maximum	0.80	0.70	0.40	0.15	1.20	0.35	0.25	0.15	NA	NA	NA	0.05	0.15
Minimum	0.40	0.00	0.15	0.00	0.80	0.04	0.00	0.00	NA	NA	NA	0.00	0.00
100856	.73	.35	.30	.09	.94	.09	.07	.03	.00	.00	.00	.01	.03

## Applicable Requirements:

ASTM-B221-08-STENCILED ASME-SB221 1998 SECT II AMS-QQ-A-200/8 UNS#96061 (T6511 also conforms to T6-not applicable to other tempers)

## Miscellaneous Notes

MANUFACTURED IN USA MELTED IN USA

## CERTIFICATION

Kaiser Aluminum Fabricated Products, LLC hereby certifies that metal shipped under this order has been inspected and tested and found in conformance with applicable specifications forming a part of the description set forth in Kaiser's sales acknowledgement form. Any warranty is limited to that shown on Kaiser's general terms and conditions of sale. Test reports are on file, subject to examination.

Alex Yeh, Quality & Technology Manager

*Alex Yeh*

Plant Serial: 00009484

Kaiser Order Number: 604562

Line Item: 001

# THYSSENKRUPP MATERIALS NA

DART AEROSPACE

ALUMINUM FLAT BAR 6061-T6511

2.00" x 2.50" x 144.0000"

PART NO.

PO/Ref 153328

We certify that this is a true copy of the report furnished by the producer of the metal, or data resulting from tests made in approved labs.

## Certificate of Mill Test Results

BL PEC-737243-005

3 Nov 11

Signed by:

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**KAISER**  
**ALUMINUM**  
**FABRICATED PRODUCTS**

*Boyd in Class*

## CERTIFIED TEST REPORT

<http://Certs.KaiserAluminum.com>

KAISER ALUMINUM  
FABRICATED PRODUCTS, LLC  
5205 KAISER DRIVE  
KALAMAZOO, MI 49048

CUSTOMER PO NUMBER: PEC-232231-1		CUSTOMER PART NUMBER: 020439-6		PRODUCT DESCRIPTION: 2.000 X 2.500 SC RECT BAR	
KAISER ORDER NUMBER: 601189	LINE ITEM: 001	SHIP DATE: 08/30/2011	KAISER LOT NUMBER: HK118 791	ALLOY: 6061	TEMPER: T6511
WEIGHT SHIPPED: 988.000 LB	QUANTITY: 14.000 PCS	B/L NUMBER: 601312	DIAM/DAF/THKNS: 	WIDTH: 	LENGTH: 12.000 FT
SHIP TO:  THYSSENKRUPP MATERIALS NA 2821 LANGSTAFF ROAD CONCORD, ON L4K 5C6 CANADA			SOLD TO:  THYSSENKRUPP MATERIALS NA 2821 LANGSTAFF ROAD CONCORD, ON L4K 5C6 CANADA		

### Actual Physical Properties

REFERENCE	DASH#	SAMPLE#	UTS (KSI)	YTS (KSI)	ELONG%	HARDNESS	CONDUCT.	BEND
XTR000742	0001	0001	51.1	46.7	18.7	RE 97	N/A	N/A
XTR000742	0001	0002	51.2	46.7	16.2	RE 97	N/A	N/A

### Chemical Composition (wt%), Aluminum Remainder

LIMITS	Si	Fe	Cu	Mn	Mg	Cr	Zn	Ti	Pb	Bi	Zr	Ea	Tot
Maximum	0.80	0.70	0.40	0.15	1.20	0.35	0.25	0.15	NA	NA	NA	0.05	0.15
Minimum	0.40	0.00	0.15	0.00	0.80	0.04	0.00	0.00	NA	NA	NA	0.00	0.00

### Applicable Requirements:

ASTM-B221-09-STENCILED ASME-SB221 1998 SECT II AMS-QQ-A-200/3 UNS#96061 (T6511 also conforms to T6-not applicable to other tempers)

### Miscellaneous Notes

MANUFACTURED IN USA (PLAINFIELD, IL) MELTED IN USA

### CERTIFICATION

Kaiser Aluminum Fabricated Products, LLC hereby certifies that metal shipped under this order has been inspected and tested and found in conformance with applicable specifications forming a part of the description set forth in Kaiser's sales acknowledgement form. Any warranty is limited to that shown on Kaiser's general terms and conditions of sale. Test reports are on file, subject to examination.

Alex Yeh, Quality & Technology Manager

*Alex Yeh*

Plant Serial: 00005115

Kaiser Order Number: 601189

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Line Item: 001

DART AEROSPACE

PO/Ref 153328

BL PEC 737243-006

3Nov11

ALUMINUM SHEET 5061 T6  
1250 Nom X 48.1700" X 96.0000"

We certify that this is a true copy of the report  
furnished by the producer of the metal, or data  
resulting from tests made in approved labs.

Signed by: *[Signature]*

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PART NO.

1707

**ZHENGZHOU MINGTAI INDUSTRY CO., LTD**  
CHANGCHUN ROAD NO.6, HIGH AND NEW TECHNOLOGY ZONE,  
ZHENGZHOU HENAN CHINA  
TEL: +86-371-67896715 FAX: 86-371-67896612

### MILL TEST CERTIFICATE

TO: OLBERT METAL SALES LIMITED  
989 DERRY RD. EAST, SUITE 305 MISSISSAUGA,  
ONTARIO CANADA L5T 2J8

INVOICE NO.: ZOTO110401

CONTRACT NO: NO1709/1704

LOADING PORT: QINGDAO, CHINA

DESTINATION: TORONTO, CANADA

SHIPPING MARKS: N/M

DATE: MAY, 2, 2011

#### DESCRIPTION OF GOODS:

ALUMINUM SHEET 5052 H32 CERTIFIED  
TO ALL AA, ASTM B209, AMS/QQA 250/B, AMS 4016L SPECS.  
ALUMINUM TREAD PLATE 3003 H22 CERTIFIED TO ALL AA,  
ASTM B632/B632M.  
ALUMINUM SHEET 6061 T6 CERTIFIED  
TO ASTM B209, AMS 4027 AND AA SPECS.  
CIF TORONTO, REF: NO1709/1704

CHEMICAL COMPOSITION											
Heat No.	Alloy	Si	Fe	Cu	Mn	Mg	Zn	Ti	Cr	Others	Al
110724B	3003	0.322	0.549	0.054	1.097	0.036	0.042	0.029	< 0.005	0.15	REMAINDER
112421	6061	0.558	0.354	0.233	0.045	1.008	0.012	0.029	0.212	0.15	REMAINDER
112422	6061	0.838	0.383	0.276	0.082	1.027	0.041	0.023	0.229	0.15	REMAINDER
112423	6061	0.630	0.353	0.277	0.076	1.006	0.032	0.021	0.218	0.15	REMAINDER
112424	6061	0.580	0.339	0.269	0.059	1.068	0.022	0.024	0.188	0.15	REMAINDER
112425	6061	0.602	0.358	0.249	0.021	1.008	0.028	0.021	0.214	0.15	REMAINDER
112494	5052	0.133	0.303	0.020	0.070	2.438	0.013	0.018	0.225	0.15	REMAINDER
112639B	3003	0.282	0.504	0.055	1.057	0.025	0.045	0.031	< 0.005	0.15	REMAINDER
MECHANICAL PROPERTY											
Heat No.	Alloy	Temper	Specs(in)		Tensile strength (Mpa/ ksi)		Elongn %				
110724B	3003	H22	0.125*60*120		149		22		20		
112421	6061	T6	0.063*48*96		346		50		10		
112422	6061	T6	0.063*48*120		336		49		11		
112423	6061	T6	0.125*48*120/9		322		47		14		
112424	6061	T6	0.125*48*120/144/96		338		49		12		
112425	6061	T6	0.188*48*96		342		50		11		
112494	5052	H32	0.1*48*120/8		229		33		12		
112639B	3003	H22	0.125*60*120/144		147		21		22		

PRODUCER: ZHENGZHOU MINGTAI INDUSTRY CO., LTD

河南明泰铝业股份有限公司  
HENAN MINGTAI AL INDUSTRY CO., LTD